SILVER—ITS INTERNATIONAL ASPECTS

by

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INTRODUCTION

THE recent action of Mexico in returning to a modified silver standard after many years on a gold basis once more has called attention to the world-wide economic maladjustments resulting from the drastic decline in the value of silver during the past two years. Approximately one half of the human race either measures its wealth in terms of silver or is dependent, directly or indirectly, upon silver for means of subsistence. China with its 400,000,000 population is largely upon a silver standard as are several minor countries.[1] Most of the inhabitants of India count their wealth in silver even though the nation is upon a gold bullion standard. Other millions in Mexico, Canada, Peru and the United States are dependent for their living on silver production. The fact that within less than two years silver has lost half of its value in terms of gold has, therefore, temporarily restricted the purchasing power of a considerable portion of the world's population and contributed to the present economic depression, if it has not, as is frequently alleged, been instrumental in bringing it about.

Ever since the beginning of the recent spectacular drop in silver prices, there has been a continuous demand on the part of traders, producers, and consumers for some collective action which would restore the value of silver and stabilize it at approximately its former price. The problems raised have proved so intricate, however, and the solutions advanced have been so varied, that the only results have been sporadic efforts to raise the price in one country or another by means of embargoes and import taxes. Consequently the decline has continued almost unchecked until silver has become far cheaper than at any other time on record.[2]

BRIEF HISTORY OF SILVER FLUCTUATIONS

Throughout the greater part of history the ratio between gold and silver has been stabilized by either custom or law.[3] As long as gold and silver were both used widely for monetary purposes, their comparative value remained practically unchanged, closely approximating the production ratio of one ounce of gold to fourteen of silver. The first real decline of the white metal in recent times did not commence until 1873, the date of the initial steps towards the adoption of a gold standard by the Latin Union and the United States. By 1895, it was worth only half of its previous value, and for the following thirty years, with the exception of the period at the close of the World War, it fluctuated within comparatively narrow limits—from 50 to 70 cents an ounce. From 1917 to 1920 there was a brief interlude when silver rose to an unprecedented value. The highest mark in history was established on February 11, 1920, when silver sold in London for 89½*d* an ounce.[4] Shortly thereafter,

1. Abyssinia, Eritrea, Persia, parts of Afghanistan, Arabia and Honduras. Several of these countries, however, are in the process of transition to a gold standard.

2. It will be recalled that until the latter part of the last century most of the nations utilized both gold and silver as the basis of their currency. In 1816 England first launched upon the experiment of a currency based upon a single gold standard. It was not until 1871, however, that Germany, encouraged by the huge French indemnity, followed England's example. Two years later, in 1873, the Latin Union, comprising France, Italy, Belgium and Switzerland, concluded a preliminary agreement which was to lead to the adoption of a gold standard; the United States also definitely shifted from a bimetal to a gold basis in this year, although as late as 1896 bimetallism figured as an important issue in William J. Bryan's presidential campaign.

3. There is evidence to indicate that in prehistoric times one ounce of silver was considered the equivalent of ten ounces of gold. (E. Kann, "The Silver Crisis," *Chinese Economic Journal*, Shanghai, December 1930, Vol. VII, No. 6, p. 1298). In ancient Egypt, however, we find the reverse ratio of one ounce of gold to ten of silver given practically a religious sanction. (H. B. Elliston, "The Silver Problem," *Foreign Affairs*, New York, April 1931, Vol. 9, No. 3, p. 442). This proportion was maintained with but slight variation until comparatively recent days. In Rome the ratio of 1:12 was fixed by law. During the early Middle Ages it reverted to 1:10; later it became fixed at 1:11.3. By 1800 it had increased to 1:15, and appeared so stable at that figure that Colonne, the French economist, gave the seal of economic law to this ratio.

however, the price again dropped to approximately the pre-war level.[5]

There was another sharp decline on the silver exchange at the end of the summer of 1926 when it became evident that India would go on a gold bullion standard, but during the next two years the price was again stabilized at about 10 per cent below the former level. In the spring of 1929, however, there was another sudden break, following the first Indian sales, and the decline continued with brief interruption until February 16, 1931 when an ounce of silver could be bought in New York for 25¾ cents. Five months and a half later the price was relatively unchanged at 27⅞ cents an ounce. At this price one ounce of gold would buy seventy-four ounces of silver.

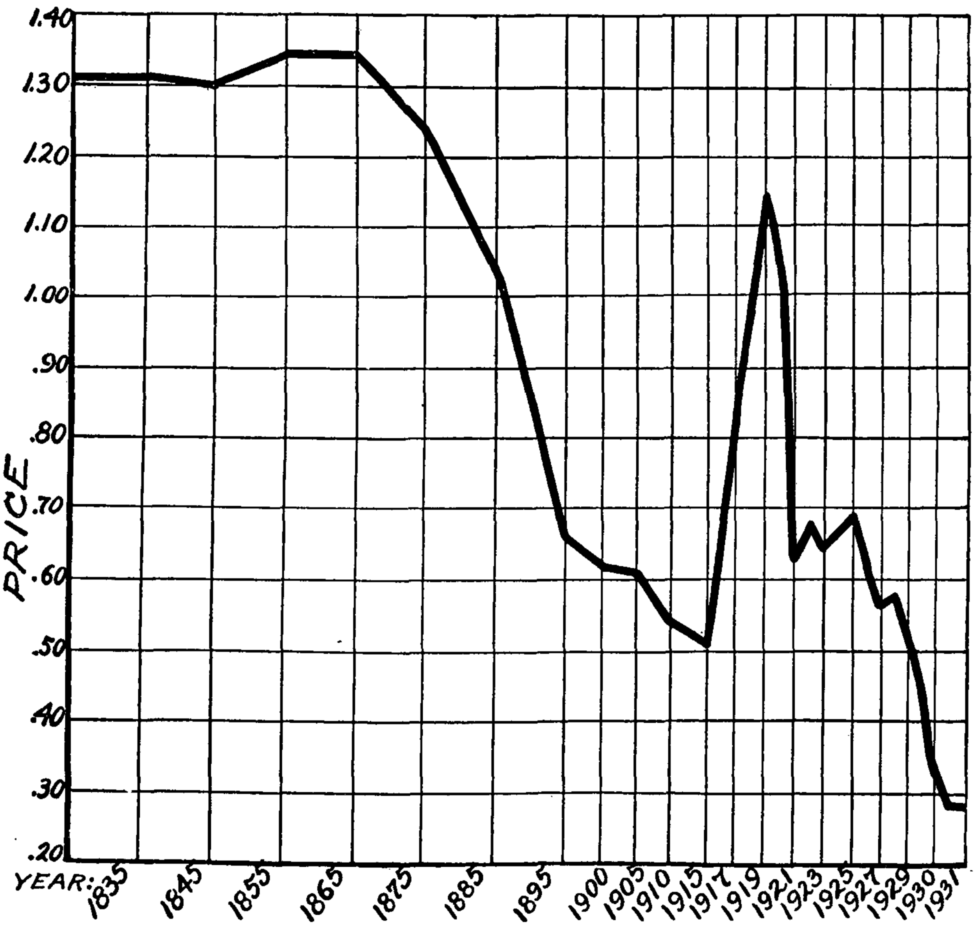
The changes in silver prices during the last century are shown in Table I and Chart I.

TABLE I
Fluctuation in Silver Price*
1835-1931
(Average price of silver in New York in dollars a fine ounce)

Year	*Price*	*Year*		*Price*
1835	1.30†	1920		1.02
1845	1.29†	1921		.63
1855	1.34†	1922		.68
1865	1.33†	1923		.65
1875	1.24	1924		.67
1885	1.06	1925		.69
1895	.66	1926		.62
1900	.62	1927		.57
1905	.61	1928		.58
1910	.54	1929		.53**
1915	.51	1930	January	.45**
1916	.67		July	.34**
1917	.84	1931	January 9	.285‡
1918	.98		July 9	.284‡
1919	1.12		August 19	.272‡

*Tables 765 and 766, Annual Report of the Director of the Mint, Treasury Department, U. S. Department of Commerce, *Statistical Abstract of the United States, 1930* (Washington, Government Printing Office, 1930), p. 769.
†Prices from 1835 to 1865 inclusive are for London.
**Quotations for 1929-30 are from *Review of the Silver Market for 1930* (New York, Handy and Harman, 1931).
‡1931 quotations taken from the *New York Times*.

CHART I: Silver Prices—1835-1931*



4. It must be remembered, however, that the British pound sterling was seriously depreciated in 1920. The highest price quoted for silver in New York was $1.388 an ounce late in 1919.

5. The average price in 1921 and in 1926 was almost exactly the same—63 cents an ounce.
*Based on Table I.

PRODUCTION AND CONSUMPTION OF SILVER

Although silver ore deposits are found throughout the world, the bulk are in North America. Mexico has long been the chief storehouse of buried treasure and is responsible for two-fifths of the world silver production; the United States is second with just under a quarter of the total, and Canada is third. Silver, moreover, is of peculiar interest to the United States since American capital has large interests in many mines outside the country, and thereby controls possibly as much as 70 per cent of the world output.[6]

Of the approximately fifteen billion ounces of silver produced since the discovery of America in 1492, six billion, or 40 per cent, have been obtained during the last thirty years.[7] The possibility of restricting this output, moreover, is complicated by the fact that most of the silver produced is a by-product of gold, copper, lead or zinc.[8] The Bureau of Mines has estimated that only one-quarter of the world's silver production is obtained from ores depending on silver for over 80 per cent of their recoverable value.[9]

The position of silver as a by-product accounts for the relatively small decrease in silver output in 1930 despite the great reduction in price. Gradually, however, lower prices of all the metals have resulted in a lessening of production. Estimates for the first quarter of 1931 indicated that the silver output was 20.3 per cent under that of the corresponding period in 1930, while the April production was 38 per cent under that of the same month of the previous year.[10] The relative production of gold and silver during the past fifty years and its distribution by countries is presented in Tables II and III.

TABLE II
Annual World Production of Gold and Silver*
1881-1930

Years	*Gold (in fine ounces)*	*Silver (in fine ounces)*
1881-1890	5,128,000†	100,457,700†
1891-1895	7,882,600†	157,581,400†
1896-1900	12,447,000†	165,793,400†
1901-1905	15,606,800†	167,995,400†
1906-1910	20,971,600†	197,251,600†
1911-1915	22,259,200†	202,475,000†
1916-1920	18,963,800†	184,646,600†
1921-1925	17,455,000†	222,361,800†
1926	19,349,000	253,795,000
1927	19,431,000	253,981,000
1928	19,755,000	257,925,000
1929	19,496,000	261,715,000
1930	....	243,700,000
Average Annual Production:	14,534,840**	175,314,380
Ratio of gold to silver:	1 to	12

*Report of the Director of the Mint, U. S. Department of Commerce, *Commerce Yearbook, 1930* (Washington, Government Printing Office, 1930), Vol. II, p. 684.

†Average annual production.

**Average gold production arrived at by including 19,500,000 ounces as an estimate for 1930.

TABLE III
Distribution of World Silver Production*
(in 1,000 fine ounces)

Section or country	*1910*	*1928*	*1929*	*1930†*
Canada	32,869	21,936	23,143	26,200
Mexico	71,372	108,537	108,700	105,700
United States	57,138	58,426	61,233	50,400
Peru	6,627	21,608	21,495	16,700
Rest of America	7,850	7,275	6,457	6,000
Europe	15,992	10,964	11,290	**
Asia	5,257	15,080	14,852	**
Rest of the World	24,611	14,099	14,545	**
TOTAL	221,716	257,925	261,715	243,700

*Report of the Director of the Mint, *Commerce Yearbook, 1930*, cited.
†1930 figures from *Review of the Silver Market for 1930*, cited.
**No figures available for 1930.

6. Elliston, "The Silver Problem," *cited*, p. 44.
7. Kann, "The Silver Crisis," *cited*, p. 1296.
8. Cf. H. M. Bratter, "Silver—Some Fundamentals," *Journal of Political Economy* (Chicago), June 1931, p. 326-29 for an extended discussion of the situation.
9. U. S. Bureau of Mines, "Economic Relations of Silver to Other Argentiferous Ores," *Economic Paper 10*, p. 2-3, quoted in Bratter, "Silver—Some Fundamentals," *cited*. The Bureau of Mines estimated a few years ago that only 48.5 per cent of the world's silver output came from mines where silver was the principal revenue producing ore. This is particularly noticeable in the United States, which ranks second in silver production, where 80 per cent of the metal comes from mines which yield some other ore. (*Ibid.*, p. 7). Bratter points out that the figure given might be reduced somewhat if based on more recent quotations for silver.
10. *New York Herald Tribune*, May 23, 1931.

Up until the last few years India has been the chief consumer of silver. It is estimated that there are at least four and a half billion ounces of the metal in the country,[11] most of which is either hoarded or cast into ornaments worn by the peasant women. Recently, however, China has been taking a larger share of the annual output than India. Together these two nations have been absorbing more than two-thirds of the total amount of silver sold on the market.

Especial attention should be given to the fact that the total annual consumption of the metal for the past decade has been considerably larger than the annual production. This may be accounted for by the fact that large amounts of silver have been thrown on the market as a result of the demonetization of the currencies of Great Britain, Germany, France and Indo-China and the large sale of stocks by the Indian government. The total amount supplied from these sources in

TABLE IV
Estimates of the Total World Supply of Silver Sold on the Market—1920-1930*
(in millions of fine ounces)

Year	*Debasement of British Coins*	*Demonetization of European Coinage*	*Sales by Indian Government*	*Total "other supplies"*	*Annual Production*	*Total World Supply*
1920	......	18.0	......	18.0	173.3	191.3
1921	......	31.0	......	31.0	171.3	202.3
1922	24.0	19.0	......	43.0	209.8	252.8
1923	25.0	20.0	......	45.0	246.0	291.0
1924	2.0	18.0	......	20.0	239.5	259.5
1925	7.0	......	......	7.0	245.1	252.1
1926	0.7	......	......	0.7	253.8	254.5
1927	1.2	8.0	9.2	18.4	254.0	272.4
1928	5.5	32.0	22.5	60.0	257.3	317.3
1929	10.0	10.0	35.0	67.0†	260.9	327.9
1930	......	22.0	29.5	71.5**	243.7	315.2

*Bratter, "Silver—Some Fundamentals," *cited*, p. 325. Based on Handy and Harman's annual reports of the silver market.
†Includes 12,000,000 ounces sold by the government of Indo-China.
**Includes 22,000,000 ounces sold by the government of Indo-China.

TABLE V
World Consumption of Silver—1929-1930*

Destination	*1929*	*1930*
INDIA		
Imports	79,200,000	95,300,000
Supplies from Government reserves sold in India	7,300,000	4,500,000
	86,500,000	99,800,000
Less Exports	4,700,000	5,300,000
Net Indian Consumption	81,800,000	94,500,000
CHINA (including Hongkong)		
Imports	136,700,000	125,900,000
Less Exports	....	2,900,000
Net Chinese Consumption	136,700,000	123,000,000
GERMANY	12,000,000	8,000,000
ARTS AND INDUSTRIES:		
In the United States and Canada	37,000,000	29,500,000
In England	6,500,000	6,000,000
COINAGE:		
U. S. Mint	2,500,000	6,100,000
Hongkong Dollars	16,000,000	14,000,000
Other Uses	35,400,000	34,100,000
TOTAL	327,900,000	315,200,000

**Review of the Silver Market for 1930*, cited.

11. Kann, "The Silver Crisis," *cited*, p. 1297.

1930 was 71,500,000 ounces, as compared with 67,000,000 ounces in the previous year. The total world supply of silver for the past eleven years, and its consumption during the past two years, are shown in Tables IV and V.

CAUSES OF SILVER FLUCTUATION

It has been seen that the widespread adoption of the gold standard led to a gradual decline in the value of silver during the twenty years following 1873. After a period of relative stability, depreciation set in again in the years immediately preceding the World War and continued well into 1915. During the war, however, there was an exceptionally heavy demand for goods from India and China and a curtailment of exports to the Far East, and this shifting of the balance of trade led to exceptional demands for silver.[12] The result was that silver rose to the point where the metallic content of the Indian rupee and of the silver coins of many other countries upon a gold standard came to be worth more than the face value of the coins as currency. Gold was, of course, practically unavailable in the Far East at that time; consequently silver was in unusual demand for purposes of hoarding For a time it seemed as if there was no limit to the height to which silver would rise, but the reaction came when, after the war, European goods again began to flood the markets of the East, causing a reversion to the normal balance of trade.

SILVER AS A COMMODITY

It is important to note, however, that during these years of inflated values, silver roughly followed the trend of all commodities, just as in the past few years its depreciation has been in line with the decline of commodity prices the world over. Many authorities cite this as an indication that silver is simply a commodity governed by the same laws that regulate all commodity prices; and that, therefore, it is useless to talk of a "silver problem" as distinct from the difficulties caused by price fluctuations in general.[13]

Silver producers, and others particularly interested in rehabilitating the price of the metal, take strenuous exception to this view.[14] They point out that inasmuch as silver is used as money by a large portion of the world's population, it is governed by special laws. Probably both of these viewpoints are well taken, for silver is, for all practical purposes, a mere commodity for most of the Western world, while at the same time it is subject to special influences because of its monetary uses. It must be remembered that commodities are subject to many varying influences, and prices do not move evenly. The element of truth in the former position, however, lies in the fact that all commodities were in great demand during the war, and that their price moved upward in terms of gold, due in part, no doubt, to the war-time inflation of currency. The increase of prices was but a reflection of the depreciation of gold, and this naturally affected the position of silver. On the other hand, it is important to note, as Chart II indicates, that at the end of the war silver rose more rapidly than other commodities, and that its recent decline has been more severe than that of the index of commodity prices.[15]

DECLINE NOT DUE TO INCREASED PRODUCTION

Although there has been a considerable increase in silver production during the last thirty years,[16] the current depreciation in silver value does not seem to be due primarily to increased production. Silver is a durable metal and the amount added to the existing supply in any one year is not suffi-

12. Cf. Vera Anstey, *The Economic Development of India* (London, Longmans, Green and Company, 1929), p. 419.

13. Ira Cross, "Silver—Its Present Position," *Proceedings of the Institute of Finance, Occidental College, Second Session* (Los Angeles, 1931), p. 9.

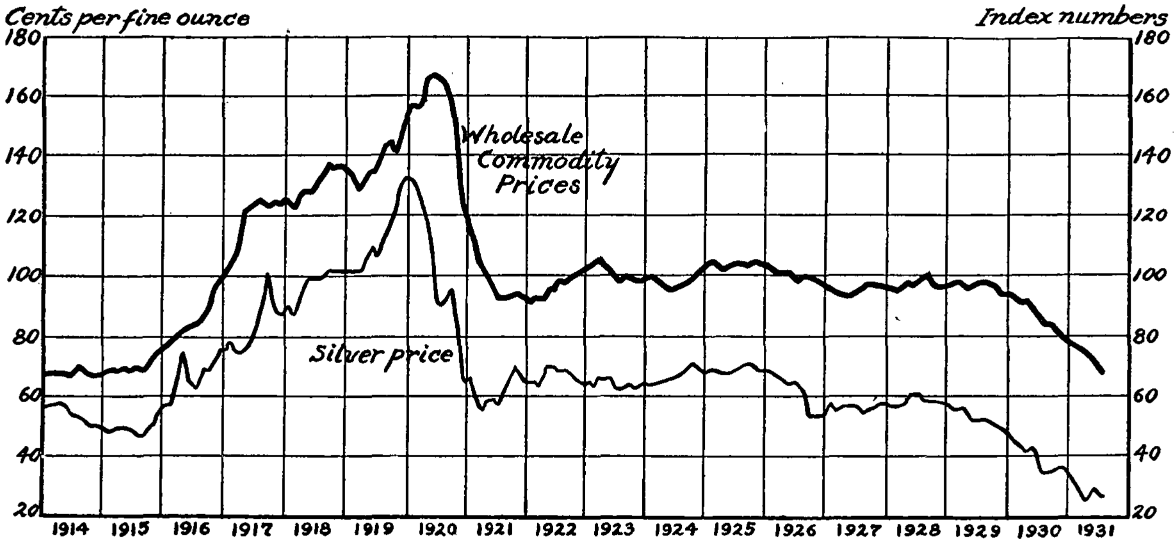
14. F. H. Brownell, *Improving World Trade Conditions by Informally Stabilizing Silver at No Fixed Ratio to Gold*, (New York, privately printed, 1931), p. 8.

15. "Silver is a highly sensitive commodity. It is, therefore, apt to react to changes in economic or political conditions almost before their significance becomes appreciated generally. . . . Silver occupies at once the place of a commodity and a money for international settlements. Its price is therefore influenced by (1) the changes in the supply of and demand for silver as a commodity, and (2) changes in the balance of payments of silver-absorbing countries. Whichever of these two causes is momentarily the stronger may be said to be the determining factor, for the time being, in the course of changes in the silver price, although both causes are intertwined." (Herbert M. Bratter, "Improvement in the Silver Price in March, 1931,." U. S. Department of Commerce, *District Office Release*, March 20, 1931).

16. Cf. Table II, p. 243.

CHART II

Silver Prices and Wholesale Commodity Prices in the United States—1914-1931*



*Copied from H. M. Bratter, "The Silver Market in 1930," *Trade Information Bulletin No. 742* (Washington, Department of Commerce, 1931). Figures for 1931 from the *New York Evening Post,* August 1, 1931.

cient in itself to exercise a determining influence on price. Moreover, silver production has not increased as rapidly as that of gold. Until 1873 the production ratio of silver and gold was approximately 14:1, but this proportion has decreased in recent years until in the last decade the ratio has been 12.5:1. Furthermore, there seems to be ample evidence that the normal world production of approximately 240 million ounces annually is not too great for the world's ordinary needs. A conservative estimate based on the consumption of the past five years would place the requirements of China and India at 85 million ounces each a year; the arts and industries use at least 40 million ounces annually, leaving only about 30 million ounces for coinage purposes in the rest of the world.[17]

ADDITIONAL FACTORS CAUSING SILVER DECLINE

In addition to increased production, the following six factors appear to have played a rôle in bringing about the decline of silver:

1. Demonetization of subsidiary currency, first by Great Britain and later by several other important European countries.

2. The adoption of the gold bullion standard by the Indian government.

3. The imposition by the Indian government of an import duty on silver of nine cents an ounce.

4. The adoption of the gold-exchange standard by Indo-China and the consequent sale of bullion by the government.

5. Internal warfare and chaotic conditions in China; and political unrest in India.

6. The world economic depression and the general decline of all commodity prices.

Demonetization

The first two of these factors are considered by many observers to be the most important. Although Holland was the first country to reduce the silver content of its currency, the action of Great Britain early in 1920 in taking advantage of the exceptionally high price of silver to reduce its coinage from a standard of .925 fine to a basic fineness of only .500 is regarded generally as having started the movement towards demonetization.[18] As a result of this action, Great Britain has been able to dispose of approximately 75 million ounces of silver on the world market during the last decade. The example of England in demonetizing its coinage was immediately followed by Australia and New Zealand, and later by most of the principal countries of Europe and South America.[19] Germany reduced the fineness of

17. Kann, "The Silver Crisis," *cited,* p. 1302.

18. This move was taken originally to prevent the melting down of coins in circulation. It is said that the reduction of silver content in British coins in 1920 netted the British treasury no less than £3,000,000 at a time of severe economic stringency. (Kann, "The Silver Crisis," *cited,* p. 1300).

19. Cf. E. Kann, "The Silver Problem in Its International Aspects," *Chinese Economic Journal,* June, 1931, Vol. VIII, No. 6, p. 581.

its silver coins from .900 to .500 in 1924; Belgium abolished her silver coins altogether in 1926; while Poland, Italy and France passed laws demonetizing their coinage during the next two years.[20] All of these countries disposed of large stocks of surplus metal, an action which unquestionably had a depressing effect on the market. In the last three years alone, no less than 175 million ounces have thus been thrown on an already depressed market. Of this quantity, more than 50 million ounces were sold in each of the years 1928 and 1929, and nearly 75 million ounces in 1930.[21] This action on the part of many European governments in debasing their silver coinage had a doubly injurious result. In addition to the large quantities of silver thrown on the market irrespective of the demand, there was also the depressive effect caused by the fear of still greater amounts being sold without notice.

Gold Standard in India and French Indo-China

This fear was accentuated by a similar uncertainty regarding the sale of the large stores held by the Government of India. The actual amount of silver sold has not been great in comparison with the reserves—less than 100,000,000 ounces—but there has constantly been a fear that more might be sold. In all, the Indian government had some 240 million ounces—equal to one year's production—of its currency reserve in 1926, but despite its sales this reserve is greater today than at that time.[22]

Inasmuch as more than half of the known silver stocks of the world are to be found in India, the market is extremely sensitive to changes in that quarter, and it is significant that the most severe breaks in silver exchange have occurred upon the receipt of unfavorable news from India. The first important decline came in 1926 immediately after the decision of the Royal Commission of Currency and Finance to recommend the establishment of a gold bullion standard for India. Another major decline set in on February 28, 1930 when the Indian government announced that a tax of nine cents an ounce would be imposed on all silver imports. While this measure undoubtedly helped to maintain the price within the country, its enactment served still further to destroy confidence in the commodity in other parts of the world, and to check the normal demand. A year later this tax was raised to about 13½ cents an ounce.

As the result of the adoption of the gold standard in Indo-China, large quantities of Saigon dollars were dumped on the Shanghai market at the end of 1929 and the beginning of 1930. In order to protect the country against such disturbing influences, the Chinese government decided on May 16, 1930 to prohibit the importation of all silver coins of foreign origin; but the action proved futile against the more fundamental influences which were at work.

Unsettled Conditions in the Far East

It is difficult to say just how much of the depression in China is due to the fall of silver, and how much the decline of silver is the result of business stagnation resulting from civil warfare, banditry and excessive taxation. But there can be little doubt but that the chaotic conditions in China and the political unrest in India have intensified the decline of the white metal. Most authorities seem to agree that China could absorb all of the vast stock of silver which has been accumulated in Shanghai if normal trade conditions and business security could be restored.[23] Metallic money cannot be easily moved about, and consequently most of the silver in the country is said to be stored up for safety in Shanghai and other protected points. Constant warfare and the ensuing exorbitant taxation have impoverished the rural population, and the consequent diminution of purchasing power prevents the re-

20. For a complete table showing the original and reduced fineness of the silver coinage of the various countries and the dates of the decrees effecting the reductions, cf. E. Kann, "The Silver Problem in its International Aspects," *Chinese Economic Journal*, June 1931, Vol. VIII, No. 6, p. 582.

21. "The Price of Silver and the Trade of the East," *Bulletin of International* News (London, Royal Institute of International Affairs), February 26, 1931, Vol. VII, No. 18. A careful analysis of the figures given indicates, however, that the sales by British India and Indo-China were included in the total.

22. Now more than 300 million ounces, due to an increasing tendency on the part of the Indian population to pay taxes in silver.

23. Cf. "The Price of Silver and the Trade of the East," *cited*, p. 1166; also Bratter, "The Silver Market in 1930," *cited*, p. 7.

absorption of the silver which has passed from the interior to the port cities. The falling off of exports despite the natural bounty given through the depreciation of silver is an indication of the degree to which both agriculture and industry have suffered from the continuation of unsettled conditions.

Effects of World Depression

There can be no question, moreover, but that there is an intimate connection between the world economic depression and the fall in the value of silver. The falling off of exports in general is probably due as much to the decline in demand on the part of foreign purchasers as it is to decline of production in China. It is noteworthy that changes in the price of silver have almost invariably preceded the rise or fall of general commodity prices. The most plausible explanation for this situation is that China and India are primarily producers of raw materials and a lowering of the silver price means that the products of these nations will be cheaper on the world's markets. On the other hand, when these raw materials are relatively low priced, the farmers of China and India have not the means to purchase silver for savings.

Among the complicating factors which greatly retard the solution of the silver problem is the widespread tendency on the part of business and political leaders to view the situation from a local and national standpoint. In the United States six contiguous states[24] furnish nine-tenths of our silver, and the representatives of these states at Washington have brought constant pressure upon the national government for legislative action which would be of benefit to silver producers. Likewise the Mexican government has sought to keep the silver mines open by pressure despite huge losses. Similarly in China and India, the chief consuming nations, the majority of individuals have looked upon the depreciation of silver as a local problem which might be alleviated by internal governmental action.

CHINA

China is the only important country in the world which is still on a full silver standard, if such a chaotic currency situation as that of China can be said to be based on any one standard. Actually a different basis of values is in force in every section of China, and in many cases two or more independent monetary standards are flourishing concurrently. Copper has been the chief basis of exchange for the common people for twenty-five centuries; but the copper unit has changed from time to time throughout this period and varies in different sections of the country. Silver has been almost exclusively used, however, in large transactions, where the weight of copper would make it inconvenient as a standard of value. The chief silver unit has been the *tael*, which is in fact a unit of weight rather than a coin, being an ounce of silver of specified fineness.[25] In all, there are several hundred different kinds of *taels*, of which about a half dozen are important in international trade. Silver dollars of foreign coinage have been current in China for nearly two centuries, but it was not until 1889 that the first Chinese silver dollar made its appearance. The Chinese dollar is now popular in most parts of the country, but despite its obvious advantage over other forms of currency, it is not yet commonly found in some sections. In addition, subsidiary silver coins of a somewhat lower silver content fluctuate in value in relation to the other forms of coinage. One variety of these coins is accepted as the chief unit of exchange in Canton and the surrounding provinces. Gold has also been used for centuries as a basis of exchange, but because of its high intrinsic value it has never enjoyed any great popularity. In addition, there are several dozen kinds of paper money, consisting mostly of bank notes backed by an indeterminate amount of silver or copper. Some of these notes circulate at par, others are heavily discounted, while still others are completely without value. There is no national paper currency, and the bank

24. Utah, Montana, Idaho, Arizona, Nevada and Colorado.

25. Weights and measures differ in various localities in China. An ounce, therefore, would not be the same in Peiping as in Shanghai.

notes are all discounted outside the city in which they are issued, even by branches of the bank of issue.

DECLINE OF TRADE

The decline in silver has been followed by a severe curtailment of Chinese foreign trade. In gold currency equivalents, Shanghai's total imports for 1930 decreased 22 per cent as compared with 1929. Imports from the United States dropped 17 per cent, those from Japan 25 per cent, and those from Great Britain 38 per cent.[26] Exports decreased a total of 40 per cent during the year. Shanghai may be taken as representative of trade conditions throughout China, for 51 per cent of the country's imports and 35 per cent of its exports passed through this port in 1930.

A still greater loss was evidenced in the report of the trade of the United States with China for the first four months of 1931 as compared with the same period in 1930. American exports to China were down 36 per cent from the previous year, while imports from China were 42 per cent under those of 1930.[27] It is significant, however, that the decline in the trade between the United States and China was almost the same as the drop in American foreign trade as a whole during the same period—37 per cent. Consequently it is impossible to attribute the loss entirely or even chiefly to the decline in the silver exchange. The fact that Chinese exports have fallen even more than imports would indicate that the effect of the world depression is likely to have been the determining factor in the decline.[28] Moreover, when the lower prices are taken into consideration, the decline is not as great as it would seem when comparing the gold valuation for the respective years.

26. U. S. Department of Commerce, *China Monthly Trade Report,* March 1, 1931, p. 10-c.

27. *Ibid.,* July 1, 1931, p. 10-e.

28. This view seems to be substantiated by the fact that American exports to China showed a sharp reversal in trend during May and June 1931 although imports from China remained at a low ebb. Exports from the United States to China were 27 per cent greater in May 1931 than during the same month of the previous year, while imports were 32 per cent less than in 1930. In June, exports were 13 per cent above those of the corresponding month a year ago, but imports remained 22 per cent under the level of June 1930. Despite the remarkable increase in May, American exports to China for the first five months of 1931 were 26 per cent under those for the same period in 1930. For details, cf. U. S. Department of Commerce, Bureau of Domestic and Foreign Trade, *Monthly Summary of Foreign Commerce of the United States,* May 1931, Part II, p. 83. For June statistics, cf. *New York Times,* August 6, 1931.

EFFECT UPON NATION'S WEALTH

There is a sharp difference of opinion as to whether or not China has suffered heavy losses in national wealth due to the fall in silver value. In a report of a sub-committee of the United States Senate Committee on Foreign Relations, it is stated that

> "the abnormal, sudden, and unprecedented fall in the price of silver has cut in half the wealth and purchasing power of the people of China, restraining them from purchasing other than the necessities of life, destroyed credit, and stagnated trade."[29]

In support of this view it is pointed out that 95 per cent of China's foreign trade is with countries which are on a gold standard, which means that the Chinese must pay for imported goods with gold, and that it now takes more than twice as much silver to buy an ounce of gold as it did at the beginning of 1929, thus imposing a hardship on the Chinese people, for, while there has been some slight increase in wages and in the price level, their income is still in silver, and has shown little if any increase during the past three or four years.

Those who take exception to this view maintain that silver currency is only a measure of wealth, and when the unit of measurement diminishes in size, the national wealth will increase in value in terms of the depreciating silver. According to this view, the only kind of wealth which really has decreased in value on account of the silver slump has been the existing store of the white metal in China, which was never unduly large.[30] The fact that imports into China have not suffered as severely as exports, may be cited in support of this opinion.

There appears to be considerable truth in each of these conflicting views. The immediate effect of the sharp decline in silver was undoubtedly a curtailment in the purchasing power of the Chinese people. The ultimate wealth of the country, however, consists of its agricultural and mineral resources. Imports are ordinarily paid for not by silver

29. "Commercial Relations with China," 71st Congress, 3rd Session, *Senate, Report No. 1600,* February 11, 1931.

30. For an extended treatment of this view see D. K. Lieu, "The Silver Question," *The China Critic,* Shanghai, July 17, 1930, Vol. III, No. 29; also Cross, "Silver—Its Present Position," *cited,* p. 11.

or gold but by exports. The almost universal fall in world commodity prices has concealed to a large extent the fact that commodity prices tend to rise in terms of silver following a decline in silver value. In other words, fluctuation in silver does cause a temporary dislocation in the Chinese economic structure which works a distinct hardship on certain classes; but it does not impoverish the country. There can be no question but that this unsettled condition has a detrimental effect on such individuals and institutions as are dependent upon a fixed silver income, and hence upon trade. But since this is the case, it would seem that China, as a nation, should be far more interested in the stabilization of silver than in its rehabilitation, for the fluctuations, unpredictable in nature, introduce an element of risk and uncertainty into business transactions which it is impossible to avoid.

LOSSES DUE TO FIXED DEBT

More critical for China, however, is the fact that the decline of silver has tended to increase the country's national indebtedness, 75 per cent of which is payable in terms of foreign currency.[31] Until the beginning of 1930 the income of the Chinese government was entirely in silver, but on February 1, 1930 customs duties began to be assessed on the basis of gold valuation. Even yet, however, the constant decline in the value of silver has made more difficult the all but impossible task of balancing the government's budget and meeting the country's sizeable foreign obligations.[32] In addition to the strictly governmental debt, there is also an indebtedness of more than $300,000,000 which was incurred in building railways.[33] This indebtedness is for the most part payable in gold while the revenues of the railways are collected in silver. In the past China has been forced to default on some of these loans, and the situation has obviously been made more critical by the current slump in silver. Since, in the long run, payment on these debts must be made in commodities, however, the country's position probably has been affected more by the decline of general commodity prices than by low silver values.

EFFECT ON THE COST OF LIVING

While we might reasonably expect the fall in the value of silver greatly to increase the cost of living in China, the index number for Shanghai prepared by the National Tariff Commission has shown a rise which has not been at all commensurate with the drop in silver. The world-wide fall in commodity prices has apparently balanced most of the disadvantages which might have been suffered from the depreciation in the price of the white metal.[34] The index numbers for food prices shows that food was actually cheaper in Shanghai during April and May of this year than it was before the silver decline set in, although it also reveals extremely violent fluctuations in prices over comparatively short periods—probably a reflection of changes on the silver market.[35]

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31. Republic of China, Commission of Financial Experts [Kemmerer Commission], *Project of Law for the Gradual Introduction of a Gold-standard Currency System in China, Together with a Report in Support Thereof* (Shanghai, Ministry of Industry, Commerce and Labor, 1929), p. 62.

32. China's foreign debt totalled £205,341,100 [$995,904,335] on January 1, 1926. Arthur G. Coons, *The Foreign Public Debt of China* (Philadelphia, University of Pennsylvania Press, 1930), p. 101.

33. Includes £49,632,885 of secured railway loans and £10,308,960 of unsecured loans. *Ibid.*, p. 76, 101.

34. A comparison of the average wholesale prices in the various countries of the world shows a severe decline during 1931 everywhere except Shanghai where there was an increase of approximately 8 per cent. General Council of the Trades Union Congress and the National Executive of the Labour Party, *Labour Yearbook, 1931* (London, Labour Publications Department, 1931), p. 85.

35. The prices of imported articles have, of course, increased greatly, but this does not affect appreciably the budget of the average Chinese household.

The following table gives the index of food prices and the general cost of living in Shanghai during the past few years. In the rest of China, with the possible exception of other port cities such as Tientsin, the cost of living has undoubtedly been less disturbed by the fluctuation of foreign exchange.

INDEX NUMBERS OF THE COST OF LIVING IN SHANGHAI

(Average of 1926=100)

Period	*Index of Food Prices*	*General Price Index*
1928	92.1	106.7
1929	98.4	102.5
1930 (Average)	118.1	121.4
May	119.9	120.7
July	130.0	129.5
September	127.1	128.1
November	104.0	115.3
1931		
January	104.9	120.9
February	122.0	136.0
March	117.4	132.2
April	98.7	121.3
May	98.7	120.3

For the foregoing table, cf. National Tariff Commission, *Prices and Price Indexes in Shanghai*, Shanghai, May 1931, Vol. VII, No. 5.

THE GOLD EMBARGO

On May 15, 1930 the Chinese government placed an embargo on the export of gold from the country. This action came too late to accomplish the purpose desired, however, as the export of gold bars from January 1 to May 16 amounted to $9,833,105 while the value of the bars remaining in Shanghai in the middle of May was estimated at only $8,000. Moreover, the embargo did not affect Hongkong, from which the export of gold continued. The total export of gold from the country during the first eight months of 1930 is said to have aggregated $17,214,582.[36] This tremendous drain on the country's resources was particularly injurious in view of the proposal of the Kemmerer Commission for the gradual introduction of a gold standard currency in China.[37]

In its report submitted on November 11, 1929, this commission, which had been engaged by the Nanking Government to study the situation which had arisen out of the chaotic condition of Chinese currency, recommended a definite plan for the substitution of a gold standard currency for the various kinds of money now in circulation. The report suggested that a gold unit to be called the *sun*, worth approximately forty cents United States currency, be substituted for the present silver dollar. All the coins, including the silver *sun*, were to be fiduciary and to be maintained at a parity with gold by means of unlimited redemption in drafts on gold-standard countries, or in gold bars, at the option of the government. Although the proposal met with almost universal favor, it was obviously impossible to make the transition at a time of severe economic stringency, or at a time when silver was rapidly depreciating.

CHINESE CUSTOMS PLACED ON A GOLD BASIS

The establishment on February 1, 1931 of a gold basis for the assessment of customs duties, however, is generally considered as a first step towards the building up of the necessary gold reserve for passing to a gold standard. This move was followed in the spring of 1931 by the issuing of customs gold unit notes at a par value of forty cents in United States currency. These notes may be used in the payment of customs duties, and it is thought by certain observers that they may gain general circulation in some parts of China because of their relative stability. There has been a tendency recently for shopkeepers and others dealing in imported goods to quote the gold value of such articles, with payment to be made in silver at the day's rate of exchange. It is still too soon to say whether this tendency will lead to the gradual introduction of a gold standard, but such a development is not unlikely in the port cities. The fact that even after more than thirty years the silver dollar is not universally current in China indicates, however, the difficulty of introducing a totally new currency. The Chinese are accustomed to estimate the value of a coin according to the bullion value of its metal content, and the introduction of a token currency is bound to incur resistance in many sections. In the meantime it might be argued that since, in China at least, silver has proved to be more stable than gold in relation to commodity prices, it is a more suitable basis for currency than gold.

INDIA

DEVELOPMENT OF INDIA'S CURRENCY SYSTEM

The standard silver rupee was not introduced into India as legal tender until 1835. Before that date a number of different gold and silver coins had been in circulation, and the monetary situation had been much as it is in China today. The general tendency towards financial improvement was checked by the decline in the value of silver which set in after 1873. The fact that India is a part of the British Empire made the problems which arose from the depreciation of Indian currency peculiarly serious because of the large sums which must be remitted to the

36. Bratter, "The Silver Market in 1930,' *cited*, p. 9.

37. For the report of the Commission, cf. *Project of Law for the Gradual Introduction of a Gold-standard Currency System in China*, cited.

mother country annually. Consequently an Indian Currency Committee, headed by Lord Hershell and appointed in 1893, recommended the closing of the Indian mints, for the purpose of reducing the number of rupees in circulation until an exchange rate of 1*s* 4*d* should be reached. The object of this measure was the establishment of a gold standard as soon as possible after the rupee had been stabilized at the value set. The Fowler Committee, appointed in 1898, made the British sovereign legal tender along with the rupee at the fixed exchange ratio proposed by the Hershell committee, but no provision was made for the free exchange of rupees for gold. Until the war, however, the silver rupee was maintained at parity in relation to gold, India being on what has been technically called a sterling exchange standard.

Trouble ensued, however, from 1916 onward when the silver content of the rupee coin became worth more than its value as currency. As the authorities found themselves unable to maintain the fixed standard, they allowed the rupee to break away from its moorings and follow the course of silver prices. The Babington-Smith committee, which was appointed in May, 1919, thereupon tried to stabilize the Indian unit at 2*s* a rupee, but almost immediately after its recommendation was made law, silver began its post-war decline with the result that the rupee was again left to find its own level.[38]

In 1926 the Royal Commission on Indian Currency and Finance decided upon a gold bullion standard as the most satisfactory system for India, and the exchange rate of the rupee was modified to 1*s* 6*d*.[39] It was evident that the Indian government was placed in a position where it would be necessary to dispose of its surplus silver stocks in order to build up an adequate gold reserve, and the first government sales after the Indian Currency Act of 1927.

VALUE OF HOARDED SILVER CUT IN HALF

Although India has not actually been on a free silver standard since 1893, her problem is greatly complicated by the age-old habit of the Indian people of hoarding their savings in either silver ornaments or bullion. Thus, it is possible that the Indian people have lost even more than the Chinese as the result of the fall of silver; their loss has been an absolute one, tempered only by the fact that the high import duty has succeeded in preventing Indian silver from dropping as low as it has in the outside world. Some idea of the economic loss which has been incurred through the depreciation of silver may be obtained when one recalls that the total stock of silver in India is estimated to be four and a half billion ounces. Since silver has declined approximately thirty-four cents on ounce since 1926, the theoretical loss to India could be placed at virtually three billion dollars. Although the government itself has suffered a proportion of this loss, most of it has been borne by the peasant farmers who habitually invest their entire savings in silver ornaments. Much of the loss which has been incurred, however, can probably be discounted on the grounds that most of the precious metal stored away in the country is not intended for sale, and if sold is replaced as soon as convenient. If an Indian farmer needs capital to tide him over until the next harvest, he is likely to sell his wife's jewelry to raise the necessary sum. Under present conditions, this would mean that he would get appreciably less money for his store of silver than he paid for it; on the other hand, as soon as his crops have been sold, he is almost certain to buy back an equivalent amount of silver, which he can replace for the same sum which he obtained for it earlier. Hence the loss in the value of the metal is not likely to affect the standard of living of the Indian people to any great extent.

SALES OF SILVER BY THE INDIAN GOVERNMENT

Propagandists for American silver interests claim that the Indian government should have refrained from selling silver once the decline had set in. In this connection it is interesting to note that the Royal Commission pointed out in detail the danger to the world if India should pass on to a full gold cur-

38. Anstey, *The Economic Development of India*, cited, p. 421-424.

39. *Report of the Royal Commission on Indian Currency and Finance* (London, H. M. Stationery Office, 1926), Cmd. 2687, Vol. I, p. 18-19.

rency standard, emphasizing especially its repercussion upon China.[40] Some observers contend that the gold bullion system recommended by the Commission had almost precisely the effect which that group wished to avoid.[41]

In response to the repeated demands on the part of American producers that the Indian government abstain from further sales of silver, Sir George Schuster, Finance Member of the government, pointed out that

> "the government of India cannot agree with the one-sided argument suggested by the United States' silver producers that production should continue unrestricted while various governments which hold stocks should refrain from selling."[42]

In other words, the holders of the existing stocks of silver see no reason why they should sacrifice in order to subsidize the silver producers of the world.[43]

Partly as a revenue measure and partly to maintain silver prices within the country, the Indian budget for 1930 provided for the reimposition of the import duty on silver which had been discontinued in 1920. The duty was fixed at 9 cents an ounce, effective March 1, 1930; and the rate was raised to 13½ cents a year later. In spite of this barrier, silver consumption during 1930 was 13 million ounces greater than it had been the previous year.[44] Even after subtracting the relatively large sales of the Indian government, the trade statistics for 1929 and 1930 show a net import of silver of 122,164,500 ounces. This would indicate that the Indian people have not lost confidence in silver, and it is even possible that Indian purchases were stimulated by the abnormal cheapness of the metal. This is balanced, however, by the fact that the rupee value of the imported silver declined from 138,368,227 rupees in 1927-1928 to 97,706,926 rupees in 1928-1929 and 86,212,198 rupees in 1929-1930.[45]

MEXICO

The drop in the price of silver has proved to be little short of a national disaster for Mexico. Unlike China and India, which import silver in exchange for commodities, one of Mexico's most important sources of wealth has been the export of silver bullion, and consequently her national income is dependent to a considerable degree upon the price of the white metal. For nearly four centuries silver mining has been the most important and profitable industry in the country, and ever since the Spanish conquest Mexico has regularly produced between two- and three-fifths of the world's annual supply of the metal.[46] The total value of Mexico's silver output during the four centuries since the Spanish conquest has been officially estimated to be more than three billion dollars.[47]

Today very few, if any, of the so-called straight silver mines can operate profitably at the present low price of the white metal. Although a number of mines have been forced to close, the Mexican government has exercised considerable pressure to keep as many open as possible to avoid an increase of unemployment. Many establishments have managed to continue operations by cutting wages and operating expenses to the limit,[48] although others have been reduced to working one or two days a week.[49] The government also has tried to maintain production by reducing taxation on the silver mines and by abolishing the customary fees and imposts on mining claims. As a result, the total silver production for 1930 decreased only 3 per cent over the previous

40. *Ibid.*

41. The establishment of a gold currency, however, would have required the purchase of a considerable amount of gold and the consequent sale of additional silver, while under the gold bullion system there is no gold coinage and gold is required only for purposes of international exchange.

42. *New York Herald Tribune,* May 23, 1931.

43. Obviously the Indian government is interested in disposing of its surplus stocks of silver at the best possible price, and consequently would support any reasonable measure for enhancing its value. But the critical financial position of the government is such that it feels itself unable to promise to refrain from selling unless there is some certainty that the producers will cooperate in measures designed to raise the price of the metal.

44. Cf. Table V, p. 244.

45. Bratter, "The Silver Market for 1930," *cited,* p. 14.

46. One small district in Guanajuato, three by six miles in extent, is said by one authority to have yielded nearly three-fifths of the world's production during the last three hundred years. Percy F. Martin, "Mexico's Treasure House, Guanajuato," quoted in *Mexico,* August 1, 1923, p. 3.

47. D. Aikman, "Mexico's Silver Empire Totters," *New York Times.* August 17, 1930.

48. Bratter, "The Silver Market for 1930," *cited,* p. 18; also *New York Herald Tribune,* May 10, 1931.

49. Closing is made especially difficult under the provisions of Mexican labor legislation which requires that compensation be given to workers who are laid off.

year.[50] The demoralization of the silver industry has caused the economic depression which began in Mexico in 1928 to become increasingly severe. The decline of mining has affected the railroads, with the result that they are said to be losing more than a half million pesos a month in operating revenue.[51]

DEPRECIATION OF THE SILVER PESO

Internally Mexico has been primarily concerned over the depreciation of the silver peso, a token coin, in relation to the standard gold peso. Although Mexico has been theoretically on a gold basis since March 25, 1905, she has constantly been beset with currency difficulties. During the turbulent days of the revolution, metallic money virtually disappeared and was not reintroduced until November 1916. In 1924 it became necessary to declare an embargo on gold and restrict its export to the Bank of Mexico. This virtually constituted an abandonment of the gold standard, and as the government was unable to redeem the silver peso in gold, in 1928 it began to depreciate in relation to the gold peso; while even the latter sold at a discount when exchanged for United States currency. Although this situation cannot be said to have resulted directly from the decline in the value of silver bullion, it was connected with Mexico's balance of international payments, in which the value of the country's silver export is an important factor. In the five years from 1925 to 1929 silver constituted 17.1 per cent of Mexican exports, but by 1929 declining silver prices had so reduced the value of the output that despite the record production, the white metal formed only 15.9 per cent of the total.[52] This fact coupled with the general decline of all commodity prices has adversely affected the normally favorable balance of trade[53] and caused a serious decline in Mexican exchange.

The internal currency problem has been complicated by the fact that like the Chinese, the Mexicans have shown a tendency to judge their coinage by its bullion value. Between 1918 and 1920 when silver was high, the silver peso sold at a premium in relation to gold, and there was a tendency for it to disappear from circulation. It is probable, then, that the steadily decreasing price of silver bullion may have somewhat undermined the people's confidence in the metal and aggravated the depreciation of the silver peso. At any rate, after selling at an average discount of 3.6 per cent in relation to the gold peso during 1928 and 1929, the silver unit dropped sharply until it was selling at 20 per cent discount in December 1930.

This discrepancy between the value of the country's two units of currency brought about serious financial difficulties. Industrial establishments sought to pay wages exclusively in silver in order to reduce expenses, but in many cases serious disputes ensued because of the unwillingness of the workers to accept silver.[54] The government itself, however, set a precedent in December 1930 by putting all its employees on a silver basis,[55] and its example seems to have been followed almost universally. This practice proved to be a severe hardship to certain classes, because rents, mortgages, and many other fixed charges had been stipulated to be payable only in gold.[56] Even the government itself was seriously affected as its revenues were primarily in silver, and it found itself unable to meet the gold payments required by the newly concluded debt agreement with the International Committee of Bankers on Mexico. This problem was solved temporarily by a new agreement reached January 30, 1931 whereby Mexico's creditors allowed it to make a deposit of the 1930 payment in

50. This unusual situation is explained as follows: "Various mines having a high cost of maintenance have been closed. But the larger establishments are continuing operation without decreasing their output appreciably, although practicing certain economies." *El Economista* (Mexico City), February 1, 1931, p. 6.

51. *El Universal* (Mexico City), February 6, 1931.

52. Bratter, "Silver—Some Fundamentals," *cited*, p. 361. Mexico exported silver bullion valued at $58,512,000 in 1927 and $63,181,000 in 1928. (*Commerce Yearbook, 1930*, cited, Vol. II, p. 388). The exact figures for 1929 and 1930 are not given.

53. The trade position between the United States and Mexico is indicated by the export and import figures for the last four years, which follow:

Year	*Exports from Mexico to the United States*	*Imports into Mexico from the United States*
1927	$137,800,000	$109,100,000
1928	124,500,000	115,655,000
1929	117,700,000	133,960,000
1930	80,300,000	116,214,072

Cf. *Commerce Yearbook, 1930*, cited, Vol. II, p. 387; *Monthly Summary of Foreign Commerce of the United States*, cited, December 1930, Part II.

54. *El Universal* (Mexico City), July 19, 1931.

55. Bratter, "The Silver Market for 1930," *cited*, p. 19.

56. *Excelsior* (Mexico City), June 26, 1931.

Mexico in silver pesos; it was stipulated, however, that if the silver peso did not regain parity, the Mexican government would make up the difference in gold.[57]

MEXICO'S NEW CURRENCY ACT

Although the silver peso gained somewhat in January due to the securing of $15,000,000 from the National City Bank of New York and the success of the debt negotiations, there was another severe decline in May and it soon became evident that drastic measures would be necessary. Even the withdrawal from circulation of ten million silver pesos did not seem to ease the situation any more than had the earlier action of forbidding the importation of all silver coins, Mexican and foreign alike. The financial crisis had become so severe by mid-summer that ex-President Plutarco Elias Calles was pressed into service as president of the Bank of Mexico in the hope of averting a catastrophe. It was at his suggestion that the Chamber of Deputies voted on July 25 to abolish the gold standard and place Mexico upon a modified silver basis.[58] The gold peso was declared to be no longer legal tender, and all debts contracted on a gold basis were made payable in silver. It is important to note, however, that this move was not equivalent to putting Mexico upon a full silver standard, for the coining of additional silver pesos is strictly prohibited, and the silver peso retains a theoretical parity of seventy-five centigrams of pure gold.[59]

PROPOSED REMEDIES

The solution of the problems arising from the depreciation of silver is made difficult because, although the decline in the value of copper, lead and zinc has lead to the suspension of mining operations in many of the marginal mines, all of these metals have considerable commercial utility and as long as they are in demand silver will be brought forth in large quantities. Under these circumstances it is evident that silver may even decline further in value unless some new use for it is discovered. Experiments have indicated that tarnish-resisting silver may be commercially practicable, and if it proves to be so it is felt that the market might be extended considerably. Because of the small proportion of silver which is used in the arts, however, it is believed that there is little likelihood of such a new process affecting silver prices appreciably. The only real hope in this field would seem to lie in the possible discovery of new industrial uses of a type not yet envisioned. Meanwhile, a number of schemes for raising the price of the metal have been set forth; but almost without exception they propose either the adoption of bimetallism in some form or an international agreement for the stabilization and control of the prices of silver, or both.

BIMETALLISM

Although bimetallism has been discredited in the United States since the memorable presidential campaign of William Jennings Bryan in 1896 for free and unrestricted coinage of silver at the ratio of 16 to 1, its advocates point out that conditions have changed fundamentally since the beginning of the century and that it is now necessary to restore silver to its former position as a standard of value. Several reasons have been adduced in support of this contention in addition to the general desirability of rehabilitating the value of silver. The recent decline of commodity prices has won converts to the already widespread belief that the present gold supply of the world is

57. *New York Times*, January 31, 1931.

58. For the text of the decree, cf. *La Prensa* (New York), August 5, 1931.

59. *Cf.* statement of Sr. Montes de Oca, Secretary of the Treasury, *New York Herald Tribune*, August 3, 1931.
Although the new silver currency law has succeeded in alleviating some of the strains inherent in the previous intolerable monetary situation, it has raised a number of new difficulties. Commodity prices have advanced at least 20 per cent; there have been heavy withdrawals of bank deposits and transfer of funds outside of the country; and there has been a sharp reduction in foreign trade. The establishment of the silver basis, on the one hand, has been of undoubted assistance to debtors and the working class generally as their fixed obligations have been lightened, but has worked a corresponding hardship on the propertied and business elements of the country. It has been particularly unpopular with foreign business interests, which have been considerably affected by the difficulties of maintaining trade and the uncertainties of the general financial situation. Since passing to a silver standard, the peso has been quoted at approximately three for a dollar as compared with a parity of forty-nine cents, and has shown signs of further weakening. On August 26 the silver peso was quoted on the New York Exchange at 100 pesos for $32. (*New York Times*, August 27, 1931).

inadequate for the demands of modern commerce and industry.[60] Moreover, the fact that more than 60 per cent of the world's gold supply is in the hands of the United States and France has created an abnormal shortage in other countries which has already led to serious financial consequences.[61] The sponsors of bimetallism would remedy the condition resulting from the alleged inadequacy of gold by an international agreement to restore silver to its former monetary position at a fixed ratio to gold.[62] There is some difference of opinion as to the most satisfactory ratio to be adopted, but most bimetallists look forward to restoring eventually a proportion of about 15 to 1, which would be roughly equivalent to the relative production of silver and gold.[63]

Among the various objections to this proposal the primary one seems to be the virtual impossibility of maintaining a fixed ratio between silver and gold over an extended period. There is always a tendency for the cheaper of the two metals—in relation to the fixed ratio—to drive the more valuable metal out of circulation. While an international agreement would minimize that danger, it is contended that it would be all but impossible to secure uniform international action in such a controversial field. Moreover, many bankers look upon bimetallism as too cumbersome a standard for use as the basis of our modern complex credit machinery. The fact that it has been tried and found wanting is also a powerful objection to the proposal, especially from a psychological point of view. The fundamental basis of opposition, however, lies in the fact that bimetallism would be a form of inflation. Bimetallism, or any scheme which would raise the value of silver, would increase the purchasing power of all who produce or possess the metal. By raising the effective demand for goods of a large section of mankind in this manner, there would be a tendency for prices to increase, and for business to be stimulated, thereby forcing the economic machinery of the world to adapt itself to new conditions. While there are many economists who feel that inflation is necessary if the world is to recover from the current depression, the majority of financiers seem opposed to it because they fear it would involve an increase in the cost of living, cause loss of income to those dependent on fixed-income-bearing securities and tend to overstimulate production.[64] Critics of bimetallism also maintain that there is no reason why silver producers should be aided when the producers of other basic commodities like wheat, cotton, sugar, oil and copper are refused subsidies to protect them from the effect of the drastic deflation of general commodity prices.

AN INTERNATIONAL CONFERENCE

It is becoming almost universally recognized that the efforts of individual countries to deal with the silver problem are doomed to failure unless some form of international agreement can be secured. Most of the

60. Cf. Edwin F. Gay, "The Gold Problem," *Foreign Affairs* (New York), January 1931, Vol. 9, No. 2. For a complete survey of the gold question cf. League of Nations, Economic and Financial Section, *Interim Report of the Gold Delegation of the Financial Committee*, C.375.M.161.1930.II, especially A. Loveday, "Gold: Supply and Demand," *ibid.*, p. 88-120.

61. *The New York Herald Tribune* (July 26, 1931) gives the distribution of gold as follows:

United States	$4,951,000,000
France	2,223,203,000
Great Britain	664,166,652
Germany	332,100,000

According to the report of the Gold Delegation of the Financial Committee of the League of Nations the total monetary gold stocks in the world in 1928 were $10,949,000,000, while the average annual increase is $237,000,000. The United States now possesses 43 per cent of the world's supply, and France more than 19 per cent, or both a total of approximately 62 per cent. In spite of its recent losses, Great Britain still remains third with a little less than 6 per cent of the world's supply. These three nations, thus, possessed more than two-thirds of the total amount.

62. During recent months several prominent British financiers have declared in favor of bimetallism. (Cf. J. F. Darling, "The Rehabilitation of Silver," *Pamphlets of the Royal Empire Society, No. 4* (London, 1930), p. 1-14). Cf. also a letter of Lord Hanson and comments upon it by the financial editor of *The Times*. (*The Times* (London), July 22, 1931); and statement of Sir Henri Deterding that "immediate adoption of bimetallism is the only possible remedy for our sick world today." (*New York Times*, August 21, 1931).

For an indication of a growing interest in bimetallism in the United States, cf. Stewart Macdonald, "Bimetallism or Stabilization," *Barron's, The National Financial Weekly* (New York), Vol. XI, No. 30, July 27, 1931.

63. Among the various schemes proposed that of Constantino Pérez Duarte, consulting engineer of the Treasury Department of Mexico, is of especial interest. Sr. Duarte suggests that as many nations as possible should agree to recognize silver bullion as legal tender in payment for all kinds of commercial transactions or debts at a legally established ratio to gold which would gradually decrease from 50 to 1 for the first five years to 25 to 1 at the end of a twenty-five year period thereafter. While its proponents recognize that the plan is a variant of bimetallism, they point out that it has an advantage over most other schemes because it does not propose any drastic rehabilitation of silver. Cf. C. P. Duarte, *The World Crisis and the Depreciation of Silver* (Mexico City, privately printed, 1931).

64. In this connection it is interesting to note the report that Germany is contemplating the purchase of 80,000,000 ounces of silver for the minting of a billion silver marks in order to meet the present currency stringency. Cf. *New York Evening Post*, July 24, 1931.

plans[65] which have been advanced thus far provide for intergovernmental action to protect the price of silver at some price agreed upon by an international conference. Except in France, England and India, it is assumed that one of the main tasks of such a conference would be to get the various governments to agree not to sell silver under a stipulated rate. The former countries, on the other hand, feel that restriction of production must be assured before any such guarantee could be made. The plans which have been proposed vary from international bimetallism to a simple agreement to maintain stability at approximately the present level. Naturally silver producers are interested primarily in raising the price to the point where silver mining would become profitable again, while the users of silver as currency are interested in stability and would prefer a more moderate change in the price level than would producers. Many bankers, on the other hand, are opposed to action of any kind, regarding silver merely as a commodity,[66] and are suspicious of all attempts at price-fixing.

These conflicting interests have thus far prevented the calling of an intergovernmental silver conference despite the fact that at times such a conference has appeared to be imminent. On February 19, 1931, upon the unanimous recommendation of the Senate Committee of Foreign Relations and as the result of pressure from silver producing states, the United States Senate adopted, without a dissenting vote, a resolution requesting President Hoover to call a conference of interested governments.[67] On June 2, however, the President announced that because of the lack of response on the part of certain nations whose participation was regarded as essential, it was impossible to call the conference at that time.[68]

Efforts had been made previously to get Japan or China to summon the conference, but like the United States they hesitated to assume the rôle of sponsor. There had also been talk of Mexico issuing the invitation for the conference, but since that country is one of the chief producers of silver, it was deemed inadvisable for it to take the leadership.

Advocates of the conference, however, were undaunted. On July 27, Senators Borah, Thomas and Smoot agreed, after a discussion with silver producers at Boise, Idaho, that it was necessary to continue the movement for an international conference.[69] A concrete plan for silver stabilization was presented by Senator Smoot, but it was agreed that it should be submitted to President Hoover before being made public.[70] On the same day, Senator Pittman, who has been the outstanding leader of the movement for political action to rehabilitate silver, declared in Tokyo that all of the countries of the Far East were willing to participate in such a conference if the United States or England would take the initiative in calling it.[71] Some Washington observers feel, moreover, that the establishment of the new National Government in England may bring about a change in the British attitude toward the proposed silver conference.[72]

65. The plan for the stabilization of silver suggested by Francis H. Brownell, Chairman of the Board of the American Smelting and Refining Company, has received international notice. Mr. Brownell proposes:

1. An informal understanding between the United States, England, India, France, Indo-China and as many other governments as possible that no sale of silver shall be made by these governments at less than some fixed price—say 50 cents an ounce.

2. An understanding that these governments will purchase the amount of silver needed for subsidiary coinage whenever the price of silver in the open market is below the figure agreed upon above.

3. Governments may sell their silver whenever the price is more than, say, five cents above the figure agreed upon.

The objections to the Brownell plan are: (1) it does not provide against the sale of privately owned silver, which is far greater than the stocks held by governments; (2) it does not provide for the limitation of production, a point upon which India is insistent if it is to refrain from sales; and (3) it is open to the same general objection as any of the other plans to rehabilitate silver.

66. Cf. Cross, "Silver, Its Present Position," *cited*, p. 9, 12-13.

67. For full text cf. "Commercial Relations with China," *Senate, Report 1600*, cited, p. 14-18.

68. *New York Times*, June 4, 1931.

69. At least one plenary session of the fourth Pan-American Commercial Conference, which meets in Washington October 5-12, will be given over to a discussion of the silver problem.

70. *New York Times*, July 28, 1931.

71. *Ibid.*

72. *New York Times*, August 25, 1931.

CONCLUSION

While there are differences of opinion concerning the exact causes and remedies of the economic disorganization brought about by the decline of silver, certain salient points may be set forth summarizing the preceding pages:

1. Silver has lost more than half its value in terms of gold during the past two and a half years. This unprecedented decline not only has resulted in serious losses to silver-producing countries such as Mexico, Peru and the United States, but also has contributed to the temporary disorganization of trade in China and caused severe losses to all persons dependent upon a fixed silver income or with accumulated savings in silver.

2. Although silver is only one of a large number of commodities to decline in price, its fall has been exceptionally severe and has involved greater complications on account of the widespread use of the metal for monetary and hoarding purposes in the East.

3. Since most silver is obtained as a by-product from the extraction of other minerals, a drastic curtailment of production may be regarded as impracticable.

4. In view of the fact that production has increased but slightly during recent years, the present low price of silver apparently is attributable primarily to its steadily decreasing use as a monetary metal. Furthermore, although experiments have been made for increasing the industrial uses of silver, no appreciable progress has been made in this direction.

5. Some form of bimetallism, or at least the re-establishment of silver as a monetary metal by the leading Western nations, are apparently the only feasible methods for restoring silver to its former value, but either procedure is fraught with serious difficulties.

6. It is only fair that the holders of existing stocks of silver should not be penalized for the benefit of the silver producers, and any scheme for stabilizing or raising the price of silver should be accompanied by an agreement for restricting production in so far as possible.

7. Although the desirability of raising the price of silver is open to question, there can be no doubt of the advantages to be gained from stabilizing it at some fixed ratio to gold as long as it remains the standard of value of a considerable portion of the world's population.

8. In the final analysis, the problem of silver leads to the more fundamental query as to the adequacy of the gold standard under present-day conditions.